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(54) Title: **DESTRUCTIBLE SURFACTANTS AND USES THEREOF**

(57) Abstract: The present invention provides methods for enhancing chemical reactions of molecules, *e.g.*, biomolecules, with destructible surfactants. The chemical reactions may involve and/or be associate with analysis, *e.g.*, solubilizing, separating, purifying and/or characterizing the molecules. In one aspect, the anionic surfactants of the present invention may be selectively broken up at relatively low pH. The resulting breakdown products of the surfactants may be removed from the molecule/sample with relative ease. The invention has applicability in a variety of analytical techniques.

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